

Louisville and Jefferson County Metropolitan Sewer District 700 West Liberty Street Louisville Kentucky 40203-1911 502-540-6000 www.msdlouky.org

November 29, 2010

Mr. Femi Akindele Remedial Project Manager Kentucky/Tennessee Section U.S. Environmental Protection Agency Region IV 61 Forsyth Street Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 11, First Quarter (FY11-1Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under <u>Reporting Requirements</u>, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, <u>Air Quality Monitoring</u>, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on November 23, 2010.

- 1. URS Corporation letters dated November 21, 2010, 2 pages.
- 2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
- 3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: September 25, 2010, 1 page.
- 4. Table 2, On-Site Meteorological Data, Sampling date, September 25, 2010, 1 page.
- 5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: September 25, 2010, 1 page.
- 6. Figure 2. Graphic Display for Gas Monitoring Well Samples for Methane.





Mr. Femi Akindele November 29, 2010 Page 2

Please advise if you have any questions concerning the attached information.

Sincerely.

chard H. Watkins, Sr.

Sever Maintenance Supervisor

RHW/rw

Lees-11-1Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet

Mr. Daniel Phelps,, Division of Waste Management

H. J. Schardein, Jr., Executive Director

Tony Marconi, I&FP Preventive Maintenance & Support Manager

Lee Lane File



41917084.00100

November 21, 2010

Mr. Rick Watkins Louisville Metropolitan Sewer District 3050 Commerce Center Place Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on September 25, 2010 (Sampling Event 48). Six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, and xylenes were detected in small quantities in select ambient samples. Vinyl chloride was detected in small quantities in wells G5R and G5L, and methane concentrations were consistent with historical data.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; warm (60-82 °F), with light variable winds.. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The September 25, 2010 field blank canister reported no positive hits other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure.



Mr. Rick Watkins Page 2 November 21, 2010

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. Following field sample collection, Well G-1 was sampled with a GA-90 analyzer to test for the presence of methane in the well. Methane was not detected in Well G-1 or the vicinity of the well above background by the instrumentation.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux

Project Manager

Enclosure

cc: Ch

Chris Davis, URS/LOU Project File/Task 48

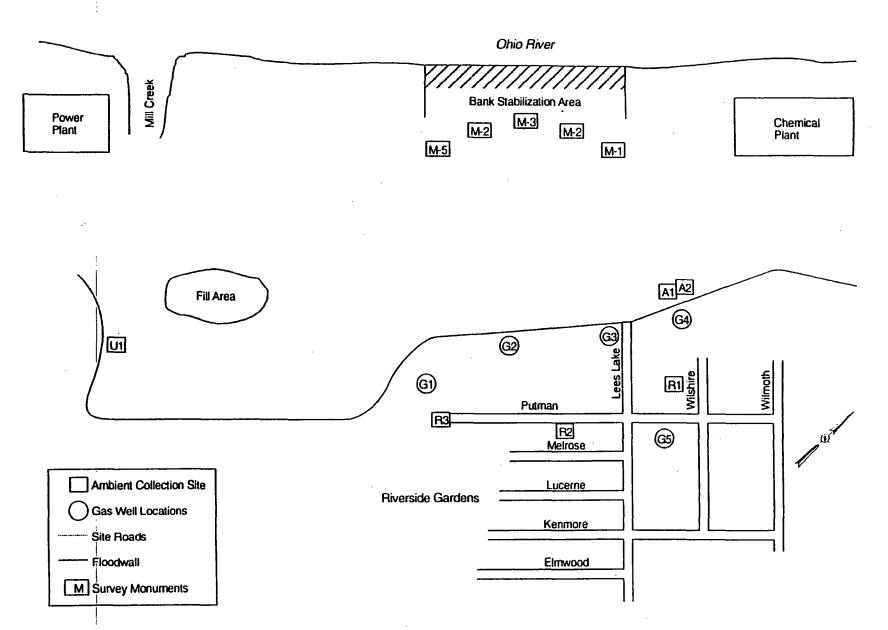


Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 25 SEPTEMBER 2010

Sample ID	Ambient Air Samples								
	A1	A2	U1	R1	R2	R3			
Canister ID	5464	RA0898	1015	RA2030	RA2109	RA2036			
Dilution Factor	4.82	6.55	5.16	4.40	5.16	5.57			
Location	ONSITE	ONSITE DUP	LG&E	4423 WILSHIRE	PUTNAM LANE	PUTNAM END			
Veriflow ID	A181861	A168513	A218997	A134120	A218796	A181856			
Compound (ppbv)			<u> </u>	<u> </u>					
Benzene	0.0318	0.0275	ND	0.0669	0.0356	ND			
Methylene chloride	ND	ND	0.0243	ND	0.0496	0.0206			
Toluene	0.053	0.0858	0.046	0.147	0.0971	0.064			
Vinyl chloride	ND	ND	ND	ND	ND	ND			
Xylene (Total)	0.0106	0.017	0.0057	0.0647	0.0315	ND			
Methane (ppmv)	5.18	5.75	6.59	6.69	5.9	6.02			

ND ≈ Non Detect

TABLE 2

LOCAL METEOROLOGICAL DATA AMBIENT AIR SAMPLES SAMPLING DATE: 25 SEPTEMBER 2010

	Barometric			Wind	Wind	
	Pressure	Temperature	Dewpoint	Direction	Speed	
Time	(in Hg)	(°F)	(°F)	(from)	(mph)	Observation
7:56 AM	29.99R	60	52	W	5	FEW CLOUDS
8:56 AM	30.00R	65	53	W	3	FEW CLOUDS
9:56 AM	30.00R	69	51	N	3	FEW CLOUDS
10:56 AM	30.03R	71	50	VARIABLE	3	FEW CLOUDS
11:56 AM	30.06R	75	47	W	7	FEW CLOUDS
12:56 PM	30.08R	78	46	NW	8	FEW CLOUDS
1:56 PM	30.09R	79	44	VARIABLE	6	FEW CLOUDS
2:56 PM	30.10R	82	41	VARIABLE	5	PT CLOUDY
3:56 PM	30.11R	82	41	W	3	MST CLOUDY
4:56 PM	30.10F	82	41	NW	10	MST CLOUDY
5:56 PM	30.10F	80	42	N	10	MST CLOUDY

Source: National Weather Service, Louisville, Ky.

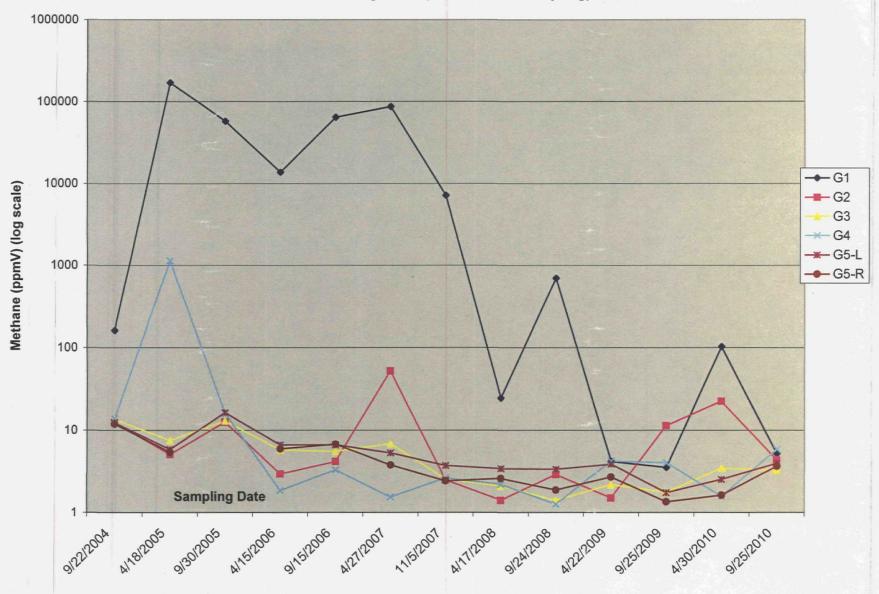
TABLE 3
TO-15 DATA SUMMARY FOR GAS MONITORING

SAMPLING DATE: 25 SEPTEMBER 2010

	Well Samples						
	G1	G2	G3	G4	G5-L	G5-R	BLANK #1
Canister ID	RA2029	RA2035	RA2028	RA2032	RA2115	5412	RA0893
Dilution Factor	4.29	4.33	4.28	4.36	4.18	4.19	2.0
Orifice	RA2029	RA2035	RA2028	RA2032	RA2027	5412	NA
Sampling Date	9/25/2010	9/25/2010	9/25/2010	9/25/2010	9/25/2010	9/25/2010	9/25/2010
Compound (ppbV)							
Benzene	0.0309	0.0169	ND	0.0022	0.0543	0.0105	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND
Toluene	0.0867	0.0212	0.0355	0.0872	0.1040	0.0427	ND
Vinyl chloride	ND	ND	ND	ND	0.0727	0.126	ND
Xylene (Total)	0.036	ND	0.0603	0.0793	0.0092	0.0469	ND
Methane (ppmV)	5.20	4.36	3.24	5.87	3.98	3.66	0.46

ND = Non-Detect

Lee's Lane Landfill - Louisville Kentucky - 6 Year Trend Wells G-1 through G-5 (Semiannual Sampling)



G-1 through G-5 Semiannual